

B1  
cancel

at the input to the AND gate 42. If there is no match, the comparator outputs a logical zero, which turns on the AND gate 42. This enables the current pixel of live video data to be passed by the AND gate as the output of the image processor 20. Those skilled in the art will appreciate that system would be clocked for proper timing and latches and other delay elements may be required for this purpose as well. These elements may be provided by one of ordinary skill in the art as needed for a given application without undue experimentation. A controller 50 controls each element of the circuit along with the clock timing in response to user input or software control. --

IN THE CLAIMS:

Please cancel Claims 2 and 13.

Please amend Claim 1 as follows:

- B2  
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1. (Twice Amended) A system for extracting an image comprising:
- first means for providing image data;
  - second means responsive to said first means for storing a first frame of image data consisting of a heterogeneous background scene;
  - third means responsive to said first means for providing a second frame of image data consisting of a second scene having said background scene at least partially obscured by a foreground object; and
  - fourth means responsive to said second and third means for processing said second frame to extract an image of said object independent of said background scene, said fourth means including:
    - means for comparing picture elements of said second frame to corresponding picture elements in said first frame; and
    - means for outputting said corresponding picture elements in said second frame if the result of the comparison is a predetermined value.

Please amend Claim 7 as follows:

*chase*  
*C1*

7. (Twice Amended) A system for extracting images comprising:

- first means for providing image data;
- second means responsive to said first means for storing a first frame of image data consisting of a heterogeneous background scene;
- third means responsive to said first means for providing a second frame of image data consisting of a second scene having said background scene at least partially obscured by a foreground object;
- fourth means for subtracting said first frame from said second frame and providing a difference frame;
- fifth means for processing said difference frame to provide a template; said fifth means including means for differentiating said filtered image to provide said template; and
- sixth means for multiplying said second frame by said template to extract an image consisting essentially of said foreground object.

*B3*  
*concl*

Please amend Claim 17 as follows:

17. An image processing method for extracting an image, said method including the steps of:

- storing a first frame of image data consisting of a heterogeneous background scene;
- providing a second frame of image data consisting of a second scene having said background scene at least partially obscured by a foreground object; and
- processing said second frame to extract an image of said object independent of said background scene, said processing step further including the steps of:
  - comparing picture elements of said second frame to corresponding picture elements in said first frame and
  - outputting said corresponding picture elements in said second frame if the result of the comparison is a predetermined value.

*B4*  
*concl*

Please add Claim 18 as follows:

-- 18. The invention of Claim 1 wherein said means for outputting said corresponding picture elements includes means for logically gating picture elements in said current frame in response to the output of said means for comparing. --

Please add Claim 19 as follows:

-- 19. The invention of Claim 18 wherein said means for logically gating includes means for logically ANDing corresponding picture elements in said second frame with the output of said means for comparing. --

Please add Claim 20 as follows:

-- 20. The invention of Claim 19 wherein said means for logically gating includes means for logically ANDing corresponding picture elements in said second frame with an inverted output of said means for comparing. --